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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,466	12/15/2003	Allan Wesley Rosenbalm	16230-US	3465
7:	590 11/02/2004		EXAMINER	
Jimme R. Oaks			TORRES, ALICIA M	
Patent Departm DEERE & CON			ART UNIT	PAPER NUMBER
One John Deer		•	3671	
Moline, IL 61	265-8098	•	DATE MAILED: 11/02/200	4

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
0.500 A 44 O	10/736,466	ROSENBALM ET AL.	\mathcal{S}'
Office Action Summary	Examiner	Art Unit	
	Alicia M Torres	3671	
The MAILING DATE of this communication Period for Reply	appears on the cover sheet w	vith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days, and the period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by some Any reply received by the Office later than three months after the rearned patent term adjustment. See 37 CFR 1.704(b).	ON. R 1.136(a). In no event, however, may and the statutory minimum of the eriod will apply and will expire SIX (6) MO statute, cause the application to become A	reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this communication (ABANDONED (35 U.S.C. § 133).	on.
Status			
1) Responsive to communication(s) filed on 1	13 August 2004.		
	This action is non-final.		
Since this application is in condition for all closed in accordance with the practice unc	owance except for formal ma	•	is
Disposition of Claims			
4) ☐ Claim(s) 1-20 is/are pending in the applica 4a) Of the above claim(s) is/are with 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1,2,4,5,7-9 and 14 is/are rejected 7) ☐ Claim(s) 3, 6, 10-13 and 15-20 is/are object 8) ☐ Claim(s) are subject to restriction and	ndrawn from consideration.		
Application Papers			}
9)☐ The specification is objected to by the Exar	miner		
10) The drawing(s) filed on is/are: a)		by the Examiner	
Applicant may not request that any objection to			
Replacement drawing sheet(s) including the co			(d).
11) The oath or declaration is objected to by th	•		` '
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of: 1. Certified copies of the priority document of the priority document of the certified copies of the priority document of the certified copies of the application from the International But * See the attached detailed Office action for a certified copies of the attached detailed Office action for a certified copies of the attached detailed Office action for a certified copies of the attached detailed Office action for a certified copies of the attached detailed Office action for a certified copies of the priority document of the certified copies of the certified copi	nents have been received. nents have been received in priority documents have bee ireau (PCT Rule 17.2(a)).	Application No n received in this National Stage	
Attachment(s) 1) D Notice of References Cited (PTO-892)		Summary (PTO-413)	
 Notice of Draftsperson's Patent Drawing Review (PTO-948 Information Disclosure Statement(s) (PTO-1449 or PTO/SI Paper No(s)/Mail Date 		o(s)/Mail Date Informal Patent Application (PTO-152) 	

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 2, 4, 5, 7-9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenbalm et al., hereafter Rosenbalm, in view of Scarnato et al., hereafter Scarnato.
- 3. In regard to claims 1, 2, 4, 5 and 7-9, Rosenbalm discloses in combination with a mowing implement including a rotary disc cutter bar (30) extending transversely to a direction of travel during mowing operation and including transversely spaced, knife-carrying rotary discs (40, 42, 44), structure (108, 110, 112) aiding in converging cut crop toward a discharge zone located behind the cutter (30), comprising: at least one converging drum (108) mounted having an upright axis of rotation located behind a line of centers of said cutter bar (30) and being located upstream relative to crop movement toward said discharge zone and adjacent at least one of said rotary discs (40), as per claim 1; and

Wherein the at least one of the rotary discs (40) is an end rotary disc, as per claim 4; and Wherein the structure (108, 110, 112) aiding in converging cut crop further includes a second converging drum (108) mounted to a top of, and for rotation with, said end rotary disc (40), as per claim 5; and

wherein said structure aiding in the delivery of crop includes at least a second converging drum (110), identical to said at least one converging drum (108), mounted for rotation about a

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second upright axis located behind and downstream from said upright axis of rotation of said at least one converging drum (108), as per claim 9.

However, Rosenbalm fails to disclose said at least one converging drum having a lower end including an outer peripheral edge located a first distance above a path followed by knife blades carried by said at least one of said rotary discs an inner region surrounding said upright axis and located a second distance, which is greater than said first distance, above said path, thereby creating a relief area beneath said at least one converging drum, as per claim 1; and

wherein said lower end of said at least one converging drum includes a top surface which is inclined upwardly and inwardly toward said upright axis of rotation of the converging drum, whereby crop engaging said lower end is lifted, as per claim 2; and

wherein the lower end of the at least one converging drum is in the shape of an inverted bowl, as per claim 7; and

wherein the surface of the at least one converging drum is conical, as per claim 8.

Scarnato discloses a similar device wherein said at least one converging drum (36) has a lower end (47) including an outer peripheral edge located a first distance above a path followed by knife blades (49) carried by said at least one of said rotary discs an inner region surrounding said upright axis and located a second distance, which is greater than said first distance, above said path, thereby creating a relief area beneath said at least one converging drum (36), as per claim 1; and

wherein said lower end of said at least one converging drum (36) includes a top surface which is inclined upwardly and inwardly toward said upright axis of rotation of the converging drum (36), whereby crop engaging said lower end is lifted, as per claim 2; and

wherein the lower end (47) of the at least one converging drum (36) is in the shape of an inverted bowl, as per claim 7; and

wherein the surface of the at least one converging drum (36) is conical, as per claim 8.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the lower end of the converging drum of Scarnato on the device of Rosenbalm in order to shred crop material.

4. In regards to claim 14, Rosenbalm discloses in combination with a mowing implement including a rotary disc cutter bar (30) extending transversely to a direction of travel during mowing operation and including transversely spaced, knife-carrying rotary discs (40, 42, 44), structure (108, 110, 112) aiding in converging cut crop toward a discharge zone located behind the cutter (30), comprising: at least one converging drum (108) mounted having an upright axis of rotation located behind a line of centers of said cutter bar (30) and being located upstream relative to crop movement toward said discharge zone and adjacent at least one of said rotary discs (40, 42, 44) so that knives carried by the at least one of the rotary discs (108, 110, 112) sweeps a path beneath said at least one converging drum (108), as per claim 14.

However, Rosenbalm fails to disclose wherein the at least one converging drum having a lower end including an upper surface inclined upwardly toward the upright axis and including a lower surface having, relative to the axis of rotation, a central region located above the path by a distance greater than a peripheral region, thereby creating a relief area beneath the at least one converging drum.

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Scarnato discloses a similar device wherein the at least one converging drum (36) has a lower end (47) including an upper surface inclined upwardly toward the upright axis and including a lower surface having, relative to the axis of rotation, a central region located above the path by a distance greater than a peripheral region, thereby creating a relief area beneath the at least one converging drum (36).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the lower end of the converging drum of Scarnato on the device of Rosenbalm in order to shred crop material.

Allowable Subject Matter

5. Claims 3, 6, 10-13 and 15-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims 1, 2, 4, 5, 7-9 and 14 have been considered but are most in view of the new ground(s) of rejection.

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Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Torres whose telephone number is 703-305-6953. The examiner can normally be reached Monday through Thursday from 7:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at 703-308-3870.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 703-305-1113. The fax number for this Group is 703-872-9306.

Supervisory Patent Examiner
Group Art Unit 3671

AMT October 29, 2004